



قائمة الاسئلة

اختبار أعمال السنة للعام الجامعي 2025/2024 - كلية الطب - شعبة الطب البشري :: كيمياء حيوية 1 - التخصص طب بشري - المستوى الأول - د
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- 1) The following sugars are considered as Enantiomers:
 - 1) - A. L-Ribose and D-Ribulose
 - 2) - B. Sucrose and Fructose
 - 3) + C. D-Glucose and L-Glucose
 - 4) - D. Mannose and Galactose
- 2) Homopolysaccharides are containing:
 - 1) - A. Same type of polysaccharides
 - 2) + B. Same type of monosaccharides
 - 3) - C. Different type of bonds
 - 4) - D. Different type of disaccharides
- 3) The glycosaminoglycan that acts as anti-coagulant is:
 - 1) - A. Hyaluronic acid
 - 2) - B. Chondroitin sulfate
 - 3) + C. Heparin
 - 4) - D. Keratin
- 4) The anomeric carbon is present in:
 - 1) - A. The finger projection structure
 - 2) + B. The cyclic structure
 - 3) - C. Disaccharides types
 - 4) - D. Heteropolysaccharides
- 5) Sugar alcohol is produced by:
 - 1) - A. Oxidation of alcohol
 - 2) + B. Reduction of alcohol
 - 3) - C. Oxidation of monosaccharides
 - 4) - D. Reduction of monosaccharides
- 6) A sugar that rotates light to the right is called:
 - 1) + A. Dextrorotatory
 - 2) - B. Levorotatory
 - 3) - C. Asymmetric
 - 4) - D. Racemic
- 7) Which of the following disaccharides containing Galactose?
 - 1) - A. Isomaltose
 - 2) + B. Lactose
 - 3) - C. Maltose
 - 4) - D. Sucrose
- 8) A Sugar acid that serves as lubricant in synovial fluid of the joints:
 - 1) + A. Hyaluronic acid
 - 2) - B. Glyceraldehyde
 - 3) - C. Cellulose
 - 4) - D. Lactose
- 9) Monosaccharides are considered as the simplest type of sugars, and they are:
 - 1) - A. Non soluble in water
 - 2) + B. Unaffected by the digestive enzymes
 - 3) - C. Containing an acidic group
 - 4) - D. Containing an amine group
- 10) The bond that connects two monosaccharides together is called:





- 1) - A. Peptide bond
 - 2) - B. Hydrogen bond
 - 3) - C. Ionic bond
 - 4) D. Glycosidic bond
- 11) Fat soluble vitamins are
- 1) - A. Soluble in alcohol
 - 2) - B. Absorbed as fats
 - 3) - C. Stored in liver
 - 4) D. All these
- 12) In reversible non-competitive enzyme activity inhibition
- 1) - A. Inhibitor bears structural resemblance to substrate
 - 2) B. Inhibitor lowers the maximum velocity attainable with a given amount of enzyme
 - 3) - C. K_m is increased
 - 4) - D. K_m is decreased
- 13) A deficiency of folate leads to
- 1) A. Megaloblastic anemia
 - 2) - B. Aplastic anemia
 - 3) - C. Pernicious anemia
 - 4) - D. Hypochromic microcytic anemia
- 14) Vitamin necessary for CoA synthesis:
- 1) A. Pantothenic acid
 - 2) - B. Vitamin C
 - 3) - C. B6
 - 4) - D. B12
- 15) Factors affecting enzyme activity:
- 1) - A. Concentration
 - 2) - B. pH
 - 3) - C. Temperature
 - 4) D. All of these
- 16) During deficiency of thiamine the concentration of the following compound rises in blood and intracellular fluid:
- 1) - A. Glycogen
 - 2) - B. Sugar
 - 3) - C. Amino acids
 - 4) D. Pyruvic acid
- 17) In competitive enzyme activity inhibition..
- 1) - A. Apparent K_m is decreased
 - 2) B. Apparent K_m is increased
 - 3) - C. V_{max} is increased
 - 4) - D. V_{max} is decreased
- 18) Coenzymes combine with
- 1) - A. Proenzymes
 - 2) B. Apoenzymes
 - 3) - C. Holoenzymes
 - 4) - D. Antienzymes
- 19) Thiamine is
- 1) A. Water-soluble vitamin
 - 2) - B. Fat soluble vitamin
 - 3) - C. Purine base





- 4) - D. Pyrimidine base
- 20) In conversion of glucose to glucose-6-phosphate, the coenzyme is
- 1) - A. Mg^{++}
 - 2) - B. ATP
 - 3) + C. Both (A) and (B)
 - 4) - D. None of these
- 21) Biotin is essential for
- 1) - A. Translation
 - 2) + B. Carboxylation
 - 3) - C. Hydroxylation
 - 4) - D. Transamination
- 22) Competitive inhibition can be relieved by raising the
- 1) - A. Enzyme concentration
 - 2) + B. Substrate concentration
 - 3) - C. Inhibitor concentration
 - 4) - D. None of these
- 23) What is the disease caused by thiamine deficiency?
- 1) - A. Nyctalopia
 - 2) - B. Scurvy
 - 3) - C. Rickets
 - 4) + D. Beriberi
- 24) In competitive enzyme activity inhibition
- 1) + A. The structure of inhibitor generally resembles that of the substrate
 - 2) - B. Inhibitor decreases apparent K_m
 - 3) - C. K_m remains unaffected
 - 4) - D. Inhibitor decreases V_{max} without affecting K_m
- 25) The three vitamins which are specially required for proper nerve functions are
- 1) - A. Thiamine, Niacin and Riboflavin
 - 2) - B. Thiamin, Folic acid, Choline
 - 3) - C. Thiamine, Riboflavin, Pantothenic acid
 - 4) + D. Thiamine, Pyridoxin, Pantothenic acid
- 26) Allosteric inhibition is also known as
- 1) - A. Competitive inhibition
 - 2) - B. Non-competitive inhibition
 - 3) + C. Feedback inhibition
 - 4) - D. None of these
- 27) Symptoms of pellagra are
- 1) - A. Dermatitis and diarrhea only
 - 2) - B. Dermatitis and dementia only
 - 3) + C. Diarrhea, dermatitis and dementia
 - 4) - D. Diarrhea and elements only
- 28) In enzyme kinetics K_m implies
- 1) + A. The substrate concentration that gives one half V_{max}
 - 2) - B. The dissociation constant for the enzyme substrate complex
 - 3) - C. Concentration of enzyme
 - 4) - D. Half of the substrate concentration required to achieve V_{max}
- 29) Vitamins are
- 1) + A. Accessory food factors
 - 2) - B. Generally synthesized in the body





- 3) - C. Produced in endocrine glands
4) - D. Proteins in nature
- 30) Example of enzyme specificity:
1) - A. Stereo specificity
2) - B. Reaction specificity
3) - C. Substrate specificity
4) D. All of these
- 31) Semi-essential amino acids include:
1) A. Arginine and histidine
2) - B. Valine and threonine
3) - C. Cystiene and methionine
4) - D. Phenylalanine and tyrosine
- 32) All the following are simple protein except:
1) - A. Albumin
2) - B. Keratin
3) - C. Collagen
4) D. Casien
- 33) Imidazole ring is present in:
1) - A. Arginine
2) - B. Tryptophan
3) C. Histidine
4) - D. Proline
- 34) The following amino acids have hydrophobic side chain except:
1) A. Tyrosin
2) - B. Alanin
3) - C. Leucine
4) - D. Valine
- 35) Which of the following amino acid has a hydroxyle group:
1) - A. Valine
2) B. Threonine
3) - C. Leucine
4) - D. Histidine
- 36) All the following amino acids are neutral except:
1) A. Aspartic acid
2) - B. Tyrosine
3) - C. Glycine
4) - D. Alanine
- 37) One of the following amino acid is not basic:
1) - A. Arginine
2) - B. Histidine
3) - C. Lysine
4) D. Glutamate
- 38) Indole ring is present in:
1) - A. Arginine
2) B. Tryptophane
3) - C. Histidine
4) - D. Proline
- 39) All the following are sulphur containing amino acids,except:
1) - A. Cysteine





- 2) - B. Methionine
3) - C. Homocystiene
4) D. Threionine
- 40) All the following are heterocyclic amino acids except:
1) - A. Histidine
2) B. Phenylalanine
3) - C. Tryptophan
4) - D. Proline
- 41) Glutathione is:
1) - A. Dipeptide
2) B. Tripeptide
3) - C. Oligopeptide
4) - D. Polypeptide
- 42) In protein structure, the α -helix and β -pleated sheet are example of:
1) - A. Primary structure
2) B. Secondary structure
3) - C. Tertiary structure
4) - D. Quaternary structure
- 43) Which bond present in the primary structure:
1) - A. Ester bond
2) B. Peptide bond
3) - C. Hydrogen bond
4) - D. Quaternary structure
- 44) An example of metalloprotein is:
1) - A. casein
2) B. Ceruloplasmin
3) - C. Gelatin
4) - D. Salmin
- 45) Which of the following amino acid is optically inactive:
1) - A. Serine
2) - B. Lysine
3) C. Proline
4) - D. Aminoacetic acid
- 46) The bond which is not broken in denaturation of protein
1) - A. Hydrogen bond
2) - B. Disulfide bond
3) C. Peptide bond
4) - D. Ionic bond
- 47) The function of plasma albumin
1) - A. Osmosis
2) - B. Transport
3) - C. Immunity
4) D. Both a and b
- 48) Building blocks of nucleic acid
1) A. Nucleotide
2) - B. Nucleoside
3) - C. Amino acids
4) - D. Histones
- 49) Identify the purine base of nucleic acids in the following





- 1) - A. Cytosine
 - 2) - B. Thymine
 - 3) + C. Adenine
 - 4) - D. Uracil
- 50) The sugar in in RNA:
- 1) + A. Ribose
 - 2) - B. Deoxyribose
 - 3) - C. Non of the above
 - 4) - D. All of the above
- 51) Leukotrienes cause:
- 1) + A. Increase in capillary permeability
 - 2) - B. Aggregation of platelets
 - 3) - C. Bronchodilation
 - 4) - D. None of them
- 52) Prostaglandins decrease all of the following EXCEPT
- 1) - A. Gastric acid secreted
 - 2) - B. Blood pressure
 - 3) + C. Uterine contraction.
 - 4) - D. Platelets aggregation
- 53) Fluidity of membranes increased by the following constituent except
- 1) - A. Polyunsaturated fatty acids.
 - 2) - B. Integral proteins.
 - 3) - C. Cholesterol
 - 4) + D. Saturated fatty acids
- 54) Obesity is accumulation of _____ in the body
- 1) - A. Water
 - 2) - B. Protein
 - 3) + C. Fat
 - 4) - D. All of them
- 55) Esterification of cholesterol occurs mainly in
- 1) - A. Adipose tissue
 - 2) + B. Liver
 - 3) - C. Kidney.
 - 4) - D. Muscle
- 56) Kerasin consists of
- 1) - A. Nervonic acid.
 - 2) + B. Lignoceric acid
 - 3) - C. Cervonic acid.
 - 4) - D. Clupanodonic acid
- 57) Cholesterol is composed of _____ carbon atoms
- 1) - A. 17
 - 2) + B. 27
 - 3) - C. 37
 - 4) - D. 25
- 58) The high storage form of energy is
- 1) - A. Cholesterol
 - 2) - B. Protein
 - 3) - C. Fatty acid
 - 4) + D. Triglycerides





59) Predominant fatty acids in meat are

- 1) - A. Monounsaturated fatty acids.
- 2) + B. Saturated fatty acids
- 3) - C. Polyunsaturated fatty acids.
- 4) - D. Mono and polyunsaturated fatty acids

60) Lipid stores are mainly present in

- 1) - A. Liver.
- 2) - B. Muscles
- 3) + C. Adipose tissue.
- 4) - D. Kidneys

